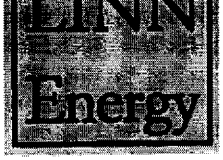

A wholly-owned subsidiary of Linn Energy, LLC
JP Morgan Chase Tower
600 Travis, Suite 5100
Houston, TX 77002
Main: 281.840.4000
Fax: 281.840.4001

January 26, 2009

The Natural Gas Star Program
U.S. EPA (6207J)
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Re: Implementation Plan for Linn Energy, LLC

Dear Sir or Madam:

Enclosed please find our Natural Gas Star Implementation Plan. If there are any questions, please do not hesitate to contact me at 281.840.4163 or pespenan@linnenergy.com.

Sincerely,

Paul M. Espenan
EH&S Manager

Enclosure

mplementation Plan

turalGas
POLLUTION PREVENTER

Production Sector

Company Information

Partner Address Label Here

If the information provided above is incorrect, please make corrections below.

Company Name:	Linn Energy, LLC
Gas Star Contact:	Paul Espenan
Position:	EH&S Manager
Address:	600 Travis, Suite 5100
City, State, Zip Code:	Houston, TX 77024
Telephone:	281.840.4163
Fax:	832.426.5963
Email:	pespenan@linnenergy.com

Implementation Plan Elements

T 1 Best Management Practices (BMPs)

ving BMPs have been identified as significant opportunities to cost effectively reduce methane emissions from ction sector. They were selected based on their applicability to the industry, economic feasibility, and cost-ess. There are 2 core BMPs for the production sector:

1 Identify and replace high-bleed pneumatic devices
2 Install flash tank separators on glycol dehydrators

ed information on these BMPs, please refer to the Lessons Learned publications on the Natural Gas STAR epa.gov/gasstar/tools/recommended.html.

T 2 Partner Reported Opportunities (PROs)

artners have reported many processes and technologies that are considered "other Best Management by the program. New partners are encouraged to evaluate and report current and new practices or ies that cost effectively reduce methane emissions. PROs are made available to all partners, and can be epa.gov/gasstar/tools/recommended.html.

T 3 Inventory Past Reductions

re encouraged to report past methane emission reductions back to 1990. Accounting for these historical will create a permanent record of your company's methane emission reduction efforts. More information is n the Spring 1999 Natural Gas STAR Partner Update, which can be viewed at: asstar/newsroom/partnerupdate.html.

he Implementation Plan is designed to be a dynamic tool for Natural Gas STAR Partners to plan their rogram activities. As company priorities and plans shift over time, the Implementation Plan may be revised or updated by submitting a new form to the program.

ELEMENT 1
Best Management Practices

BMP 1
Identify and Replace High-Bleed Pneumatic Devices

umatic devices used to control and monitor gas and liquid flows and levels in ydrators and separators, temperature in dehydrator regenerators, and pressure in h tanks emit large amounts of methane into the atmosphere. Replacing these with - or no-bleed devices reduces or eliminates emissions and improves safety.

Estimated Reduction Potential
124 Mcf/year/device

you be implementing this BMP? ☐ Yes ☒ No

If no, why?

- ☐ Not cost effective
- ☐ May consider at a later date
- ☒ Other Most, if not all, have already been replaced, by previous owners of the assets we operate.

ase describe: All new equipment uses the no-bleed type. If additional high bleed pneumatics are identified, we to replace them. Many of our assets do not utilize utilize pneumatic controls, because they are on a uum.

es, at what scale will you be implementing this BMP?

- ☐ Company Wide
- ☐ Pilot Project
- ☐ Other

ase describe: _____

Activity Summary

mber of high-bleed pneumatic devices in system? _____

mber of high-bleed pneumatic devices to be replaced? _____

Replacement Schedule

mber of high-bleed pneumatic devices to be replaced by the end of:

Year 1: _____ Year 2: _____ Year 3: _____ Year 4: _____

Additional Information on Anticipated Plans and Projects

ditional space is needed, please continue on the back.

BMP 2
Install Flash Tank Separators on Glycol Dehydrators

talling a flash tank separator in a glycol dehydrator facilitates the removal of thane and natural gas liquids from the glycol stream. The recovered gas can put back into the pipeline, used as a fuel on-site, or flared.

Estimated Reduction Potential
170 scf/MMcf of throughput

ll you be implementing this BMP? ☒ Yes ☐ No

If no, why?

- ☐ Not cost effective
- ☐ May consider at a later date
- ☐ Other _____

ease describe: _____

es, at what scale will you be implementing this BMP?

- ☐ Company Wide
- ☒ Pilot Project
- ☐ Other _____

ease describe: We have approximately 12 dehydrators company-wide that we will evaluate.

Activity Summary

mber of glycol dehydrators currently equipped with flash tank separators ____

mber of glycol dehydrators suitable for flash tank installation? ____

Replacement Schedule

mber of flash tank separators to be installed by the end of:

Year 1: ____ Year 2: ____ Year 3: ____ Year 4: ____

Additional Information on Anticipated Plans and Projects

ditional space is needed, please continue on the back.

ELEMENT 2
Best Management Practices

PROs

r company may take advantage of additional technologies or practices to reduce methane emissions. These ca
orted to Natural Gas STAR as PROs. Following is a list of some of the PROs that have been reported by other
AR partners, which may be applicable to your operations (for more information on these PROs, please view:
.gov/gasstar/tools/recommended.html*).*

nstall Vapor Recovery Units (VRUs)
erform reduced emissions completions
nstall electronic safety devices
φ Install instrument air systems
φ Eliminate unnecessary equipment and/or systems
φ Install plunger lifts in gas wells

PROs you will be implementing	Please describe
e of Infrared Camera to find leaks. vhat scale will you be implementing this BMP? ☒ Company Wide ☐ Pilot Project ☐ Other _____.	We have purchased a FLIR GasFind IR and we will be us company-wide to identify gas leaks.
ar-Powered, Temperature Actuated Chemical nps vhat scale will you be implementing this BMP? ☐ Company Wide ☒ Pilot Project ☐ Other _____	We are evaluating use of chemical pumps, including temperature controlled and solar powered.
nger Lift Installation vhat scale will you be implementing this BMP? ☒ Company Wide ☐ Pilot Project ☐ Other _____	We are installing programmable plunger lifts.
ckside natural gas liquids recovery what scale will you be implementing this BMP? ☐ Company Wide ☒ Pilot Project ☐ Other _____	We are evaluating chilling and recovery of natural gas to make natural gas liquids from a stranded gas source that currently burned.

ELEMENT 3
Inventory Past Reductions

An inventory of past reductions will help to create a permanent record of your past efforts.

a first step, many new partners find it useful to inventory and document past methane emission reduction orts. The inventory process helps companies quantify the success of their past activities and target future ission reduction efforts. Historical emission reductions identified as part of the inventory process can be orted to the Gas STAR Program.

ll you inventory past activities to include in your annual report? ☒ Yes ☐ No

es, please describe your company's plans for reviewing past emission reduction activities.

plan to quantify the reductions attributable to the no bleed pneumatics, and plunger nstallations.

Natural Gas STAR Program thanks you for your time.

se send completed forms to:

gular Mail
Natural Gas STAR Program
. EPA (6207J)
00 Pennsylvania Avenue, NW
shington, DC 20460

Express/Overnight Mail
The Natural Gas STAR Program
U.S. EPA (6207J)
1310 L Street, NW
Washington, DC 20005

estions? Please call Roger Fernandez: (202) 343-9086 or Fax (202) 343-2202

NaturalGas
EPA POLLUTION PREVENTER

porting and recordkeeping burden for this collection of estimated to average 25 hours for each new response and 12 sequent responses. Send comments on the Agency's need for on, the accuracy of the provided burden estimates, and any